
CHAPTER 11: ENVIRONMENTAL JUSTICE

Environmental justice is a process which seeks to ensure that access to transportation systems and the transportation planning process is available to all, regardless of race, color, national origin, age, sex, disability, religion or socioeconomic status. Effective transportation decisions are made when all socioeconomic groups are included throughout the planning process.

There are three fundamental environmental justice principles:

- To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations.
- To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.
- To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

ENVIRONMENTAL JUSTICE PROCESS

To ensure MITW provides access to the transportation systems and the transportation planning process to all, regardless of race or socioeconomic status the following measures were employed:

1. Map or analyze poverty status, population by age cohort and housing density in relation to planned TTIP projects to determine if any adverse effects.
2. Provide able opportunity for public participation throughout planning process.

Transportation Projects

Planned transportation projects are mapped to determine if they are within proximity to any environmental justice factors. Buffers of one quarter mile are shown for improve/expand and new projects, while buffers of 250 feet are shown for bridge or point specific projects. It is assumed that potential impacts which must be mitigated for bridges or point specific projects are close to the site. Longer corridor construction projects are usually linear and would therefore have broader potential impacts to be mitigated and may impact one or more environmental feature.

Environmental Justice Factors

Environmental justice seeks to avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects on the minority and low income population within the MITW Reservation. The lack of U.S. Census block group data for the MITW Reservation has made it difficult to perform a complete and thorough analysis; therefore the data analyzed includes poverty status, population by age cohort, group quarter locations and population density. The analysis contains general discussions on the environmental justice factor and possible mitigation measures.

Poverty Status

The poverty level is determined by the U.S. Census Bureau and is based on current cost of living estimates, as adjusted for household size. The 2006-2010 American Community Survey (ACS) 5-year estimate shows that the Menominee Reservation and Menominee County had the highest poverty levels for both the total persons below the poverty level (32.6 percent, 31.6 percent) and total families living below the poverty level (32.9 percent, 32.1 percent) (**Table 11-1**). Poverty was less common in Shawano County, Langlade County, Oconto County, and the State for this time period. In the 2006-2010 ACS 5-year estimates, residents in Shawano County (11.9 percent), Langlade County (11.0 percent), Oconto County (11.8 percent) and the State (11.6 percent) lived in poverty. Similarly, 8.5 percent of families in Shawano County, 8.4 percent of families in Langlade County, 8.7 percent of families in Oconto County, and 7.7 percent of families lived below the poverty level in the State of Wisconsin.

Most discussions regarding poverty tend to focus on children and elderly, as they are considered dependent populations which have little to no ability to change their circumstances. As a result, they are the populations most in need of assistance. According to the 2006-2010 ACS 5-year estimates, children (persons under 18) were more likely to live below poverty than elderly residents for all three jurisdictions in **Table 11-2**. Not only were children more likely to live below poverty, they comprised a greater number and share of total persons in poverty than elderly residents. For example, 609 children lived in poverty compared with 56 persons age 65 and older in the Menominee Reservation. Residents of the Menominee Reservation, regardless of age, were more likely to live in poverty than Shawano County or the State between the 2006-2010 5-year period. During this time¹, 42.0 percent of children lived in poverty on the Menominee Reservation compared to 18.8 percent in Shawano County and 15.8 percent in the State. In comparison, 56 or 11.5 percent of individuals age 65 or older lived in poverty on the reservation compared to 9.8 percent in Shawano County and 7.9 percent in the State. Persons under 65 consist of the working class and children. On the reservation, 31.3 percent of the people in this group were below poverty. While in Shawano County (9.8 percent) and the State (10.8 percent), only about ten percent of the individuals in this portion of the population were living below poverty.

Persons and Families below the poverty status need to have special consideration throughout the planning process to ensure they are included and participate.

¹ U.S. Census, 2006-2010 ACS 5-Year Estimates.

Table 11-1. Poverty Status, 2006-2010 ACS 5-Year Estimates												
	Total Persons			Total Persons Below Poverty Level			Total Families			Total Families Below Poverty Level		
	Estimate	Percent	MOE +/-	Estimate	Percent	MOE +/-	Estimate	Percent	MOE +/-	Estimate	Percent	MOE +/-
Menominee Reservation	4,452	100.0%	87	1,452	32.6%	357	1,222	100.0%	145	402	32.9%	21
Middle Village	201	100.0%	87	108	53.7%	72	65	100.0%	30	31	47.7%	8
Menominee County	4,251	100.0%	2	1,344	31.6%	350	1,157	100.0%	142	371	32.1%	33
Shawano County	40,957	100.0%	217	4,872	11.9%	629	12,059	100.0%	333	1,025	8.5%	14
Langlade County	19,775	100.0%	394	2,179	11.0%	371	6,175	100.0%	221	519	8.4%	11
Oconto County	37,280	100.0%	153	4,393	11.8%	485	11,578	100.0%	277	1,007	8.7%	13
Wisconsin	5,486,658	100.0%	1,381	637,613	11.6%	9,091	1,479,581	100.0%	7,595	113,928	7.7%	228

Source: U.S. Census, 2006-2010 ACS 5-Year Estimates

Table 11-2. Poverty Status by Age, 2006-2010 ACS 5-Year Estimates										
		Menominee Reservation			Shawano County			Wisconsin		
		Estimate	Percent	MOE +/-	Estimate	Percent	MOE +/-	Estimate	Percent	MOE +/-
2010	Total Persons	4,452	100.0%	87	40,957	100.0%	217	5,486,658	100.0%	1,381
	Persons Under 18									
	Total Persons	1,451	32.6%	98	9,505	23.2%	94	1,320,901	24.1%	1,434
	Below Poverty	609	42.0%	192	1,789	18.8%	352	208,131	15.8%	5,299
	Persons 18 to 64									
	Total Persons	2,512	56.4%	86	24,400	59.6%	113	3,443,009	62.8%	858
	Below Poverty	787	31.3%	195	2,392	9.8%	317	372,230	10.8%	4,905
	Persons 65 & Older									
	Total Persons	489	11.0%	76	7,052	17.2%	140	722,748	13.2%	596
	Below Poverty	56	11.5%	39	691	9.8%	143	57,252	7.9%	1,799

Source: U.S. Census, 2006-2010 ACS 5-Year Estimates

Note: The percentage of persons within a select category represents the share of persons within that select category. For example, in 1989 there were 1,009 persons under the age of 18 below poverty in Menominee County. Therefore, 64.3 percent of the persons under 18 in Menominee County were below poverty.

Population by Age Cohort

School age children (5 to 19 years) comprised the MITW Reservation's largest age cohort in 2010 (26.5 percent). Within the reservation, the area with the largest percent of school age children in 2010 was Keshena (32.0 percent). Although school age children in the MITW Reservation still made up the largest cohort in 2010, an aging population has led to its decrease and an increase in the reservation's second largest age cohort; the baby boomer population (45 to 64 years), 23.4 percent. The third largest age cohort for the reservation is the child bearing population (25 to 44 years), 22.7 percent in 2010. The next largest age cohort for the reservation and the potentially most disadvantaged is the elderly (65 and older), 11.3 percent. Both the school age children (5 to 19 years) and the elderly (65 and older) need to be considered throughout the planning process. **Table 11-3** represents the percent population by age cohort for 2010.

Table 11-3. Percent Population by Age Cohort, 2010														
2010	Under 5		5 to 19		20 to 24		25 to 44		45 to 64		65 and older		Total	Median Age
Menominee Reservation	448	9.9%	1,198	26.5%	305	6.8%	1,024	22.7%	1,054	23.4%	509	11.3%	4,513	28.4
Keshena	157	12.4%	404	32.0%	86	6.8%	326	25.8%	201	15.9%	88	7.0%	1,262	23.7
Neopit	76	11.0%	184	26.7%	64	9.3%	142	20.6%	172	24.9%	52	7.5%	690	27.4
Legend Lake	109	7.1%	345	22.6%	82	5.4%	302	19.8%	438	28.7%	249	16.3%	1,525	41.0
Zoar	7	7.1%	26	26.5%	7	7.1%	19	19.4%	29	29.6%	10	10.2%	98	35.0
Remainder of Menominee County	61	9.3%	163	24.8%	41	6.2%	144	21.9%	165	25.1%	83	12.6%	657	29.9
Middle Village	38	13.5%	76	27.0%	25	8.9%	91	32.4%	49	17.4%	27	9.6%	281	25.3

Source: U.S. Census 2000 & 2010, DP-1

Housing Density

Housing Density is the number of dwelling units per square mile and was compiled from the MITW land use data. The housing density map is used to locate dense areas in relation to the planned transportation projects. Single family housing is assigned one house and a group quarter unit is assigned three houses. Housing density ranges from one to forty-three units per square mile. The densest areas are located at Legend Lake, Neopit and the Keshena area. Planned transportation projects in these areas should consider the needs, safety and access of the area Tribal members during construction. Housing density can be found in **Exhibit 11-1**.

Mitigation Measures

Mitigation measures for transportation planning are proactive measures to mitigate adverse effects on disadvantaged socioeconomic groups. Measures listed below are not all encompassing and further analysis is needed if an adverse effect on a socioeconomic group is identified.

Access:

Ensure access to employment, community facilities and services are not interrupted and if they are provide alternate transportation.

Excessive Noise:

Install noise barriers or sound proofing around sensitive sites (churches, schools....).

Safety:

Provide crossing guards around schools during construction times and ban heavy vehicles on neighborhood streets.

Public Involvement:

The best way to identify potential adverse impacts prior to project construction is to include the public throughout the planning process. Hold public informational meetings in different locations to ensure all socioeconomic groups have access. Make sure meeting facilities are American with Disability Act (ADA) compliant and accessible to all members of the community. Investigate other avenues to connect with the public to gain full participation.

Long Range Transportation Plan Public Involvement

Efforts were made to include all individuals within the planning process. Public information meetings were held during all phases of the planning process. Advertisements were published in the local newspaper prior to these meetings. Newsletters and notices were distributed via mail and e-mail to various committees, organizations, and agencies throughout the planning process for distribution to as many individuals as possible. Locations of public information meetings were crucial in the public involvement process. All meeting locations were selected to include easy access for all individuals, especially transit and alternative mode users, as well as facilities which catered to the mobility needs of the disabled. Various planning documents, including the draft of this plan were open for public comment. Public participation throughout the process is characterized as consistent.

A goal of the MITW is to provide safe, secure, reliable and healthy modes of transportation to all users. As identified in the previous sections, a good portion of the planned transportation projects are scheduled for areas of poverty, elderly populations, around group quarters, and in areas of high population density. Although there are no major concerns at this time, these projects will continue to improve the accessibility, mobility, and safety of all users using all modes, while posing no significant negative impacts.

POTENTIAL IMPACTS

Economic

The LRTP has the potential to extend into economic and social arenas. Levels of service on roadways, multimodal opportunities, and accessibility for businesses are all issues to be considered. If levels of service on the transportation network decline during the planning period, the potential for more time spent on roadways would be significant. Additional business and personal travel time translates into increased transportation and environment costs. However, economic incentives exist to keep business travel expenses to a minimum, and policies within the plan target the need to maintain acceptable levels of service on roadways.

Focusing on maintaining and improving existing facilities and multimodal opportunities will provide benefits to businesses and residents. The plan identifies recommendations, which if enacted, would ensure that appropriate types and levels of multimodal transportation services are provided to the area. Additionally, maintaining and/or improving transportation facilities will enable the transportation system to continue to provide adequate accessibility to agricultural supplies and markets. An integrated transportation system combining different modes enhances the movement of goods and services. Enhanced accessibility and multi-modalism will provide incentives for businesses to expand and improve the business climate to attract new businesses.

Social

Several goals and objectives within the LRTP note the importance of an efficient, multimodal and environmentally sound transportation network. Implementation of these goals and objectives would improve quality of life and make the MITW Reservation a more attractive community. An efficient, multimodal and environmentally sound transportation system provides its users with the following:

- ***Mobility***

When the only option for personal mobility is an automobile, there are individuals who experience reduced mobility. There may be tribal members who don't own a vehicle and or don't have any other form of personal transportation. This creates a separation between those who have mobility options and those who don't. Increasing transit options, adding trails, sidewalks and bike lanes increases ones mobility options and quality of life.

- ***Accessibility***

Accessibility is related to mobility; an increase in mode options equals an increase in accessibility. The result is the ability for someone to connect to area activities (basic services, medical, retail and employment).

- ***Physical Activity***

Increased non-motorized options (walking and cycling) not only provide a mobile, accessible transportation network, but an opportunity for MITW members to get their daily physicians recommend at least 30 minutes of exercise. It is easy to get out and walk or cycle when there are opportunities right outside your front door.

- ***Safety***

Increasing the number of mode options to include cycling and walking also increases safety by providing non-motorized transportation which is safer and decreasing traffic levels.

- ***Efficiency***

Increasing transportation efficiency will reduce travel times and reduce cost for the users and the entire reservation.